



Information Technology and Applications Office (ITAO)

***Accelerating Tomorrow's
Information Technology
Systems
and Applications***

www.atp.nist.gov

1-800-ATP-FUND



National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



Information Technology and Applications Office

- **Vision**

- ATP is the centerpiece of the government's investment in civilian technology in the new millennium

- **Mission**

- Accelerate the development of innovative information technologies and IT applications for broad national benefit through partnerships with the private sector





ITAO Relationship with Industry

- Project Development
 - Support industry efforts to define high-risk, innovative projects and solicit related proposals for ATP
 - Enable greater understanding of ATP criteria and objectives in the information technology community through education and outreach
- Project Selection
- Project Management





ITAO Relationship with Industry (continued)

- Project Development
- Project Selection
 - Main group responsible for the evaluation of information technology proposals and funding recommendations for projects that best meet the ATP criteria
- Project Management





ITAO Relationship with Industry (continued)

- Project Development
- Project Selection
- Project Management
 - Collaborate with companies to ensure project success
 - Government's technical and business representatives
 - Monitor project's technical and business progress against agreed to milestones and expenditures





ITAO Funding Background

Investments in Information Technology

ATP Funding:	> \$400 million
Projects:	99
Single Companies:	73
Joint Ventures:	26
Participants:	196
University Participants:	81





ITAO Areas of Interest

Examples: Systems

System Development

Quality Assurance, Dependable Computing,
Real Time Systems, Component-Based SW

Electronic Commerce

Interoperability, Infrastructure, Security, e-Payment

Healthcare Information Systems

Medical Data, Telemedicine





ITAO Areas of Interest

Examples: Systems

Advanced Learning Systems

Authoring tools, Data Mining, Knowledge Bases

Human Computer Interface

Digital Video, Voice and Multimedia

Virtual Reality On the Internet

Tele-collaboration, Tele-presence, Avatars,
Animation

General Information Technology Systems



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ITAO Areas of Interest

Examples: Applications

Intelligent Manufacturing
Robotics, Control, E-Design

IT for Transportation
Smart Vehicles, Trains and Highways

IT for Construction
Architectural Design, Engineering,
Supply Chain

IT for Civil & Urban Planning
Utilities Planning, Communication,
Traffic Modeling





ITAO Areas of Interest

Examples: Applications

IT for Environment

Air Quality Systems, Natural Resources
Modeling

Intelligent Home

Smart Appliances, Smart Room

Biometrics and Physical Security

Finger-Print, Face Recognition

General Information Technology Applications



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Project Title:

**A Component Technology for VR
based Applications**

Funding Amount:

\$1,716,000

Participants:

University of California at Irvine

A new tool kit of software components lowers the barriers to using VR in applications like education, training, entertainment.

Virtual Reality: Aesthetic Solutions



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Digital Video Applications: Cubic Videocomm, Inc.

Project Title:

**Adaptive Video Codec for
Information Network**

ATP Funding Amount:

\$1,739,548

Other Participants:

University of Southern California

New video compression
technology enables video
messaging clearly and
efficiently.



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Healthcare Systems: Engineering Animation, Inc.

Project Title:

**A 3-D Database for Visualization
of Human Physiology**

ATP Funding Amount:

\$1,946,891

Other Participants:

Mayo Clinic

Three-dimensional, fully detailed
engineering database of the
human body using
visualization and
computational dynamics





IT for Manufacturing: Saginaw Machine Systems, Inc.

Project Title:

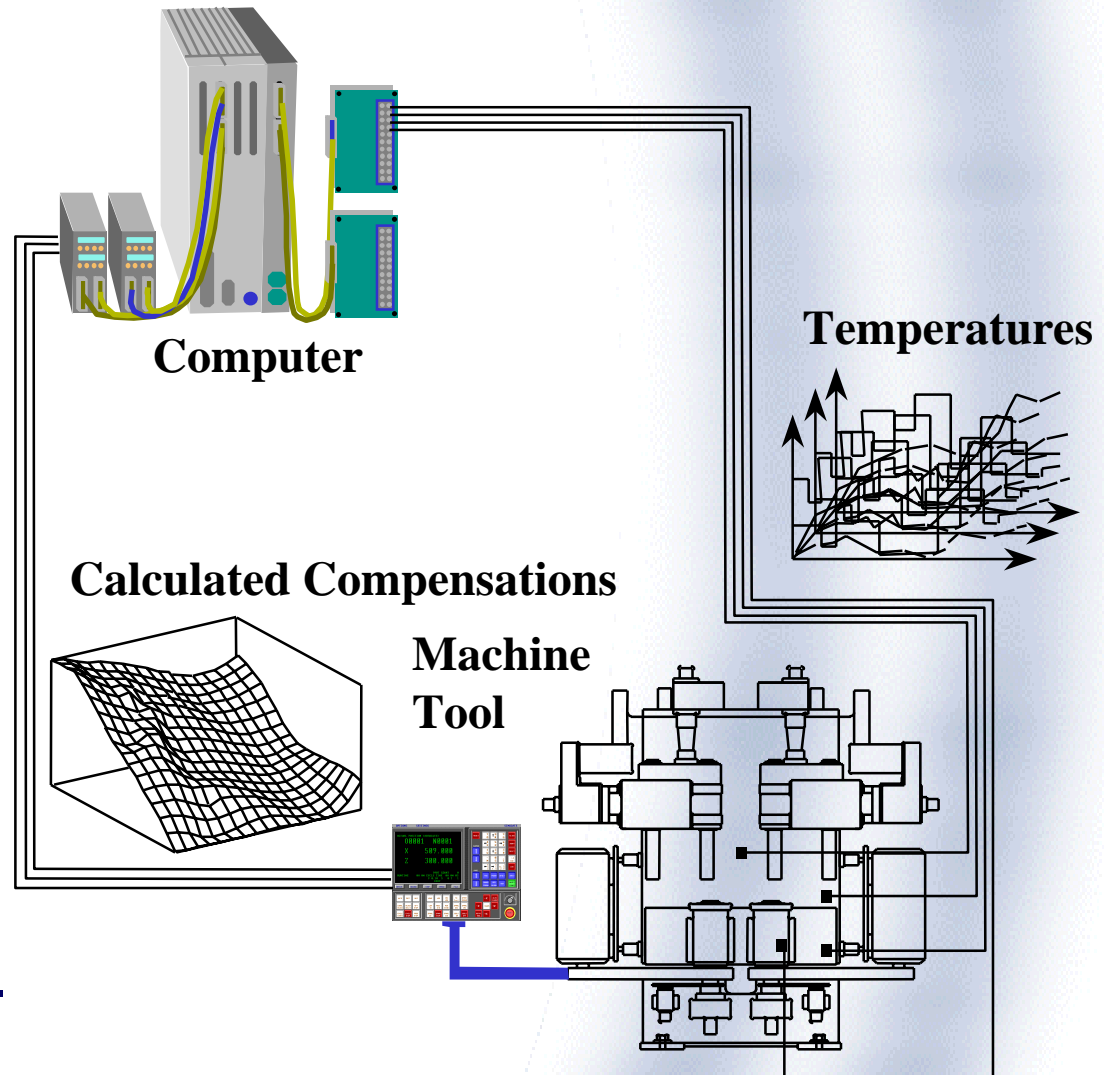
**Advanced Compensation
Techniques for Machine Tool
Accuracy**

**ATP Funding Amount:
\$540,000**

Other Participants:

University of Michigan

The project uses intelligent control methods to calculate how much the machine must compensate for variations.





Year 2000 Competition

Government Funding for year 2000

\$50.7 Million available for first-year funding of new projects

Pre-proposal Deadline: **ASAP**

Proposal Deadline: ***March 8th, 2000***

Open competition for **all** technology areas

Details available on our website or call ATP for a copy of Kit

www.atp.nist.gov

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How to Apply Algorithm

- Step 1:** Go to the ATP website www.atp.nist.gov. Click on "**Competitions**" to get information on current and past funding opportunities.
- Step 2:** Develop your idea and contact an ITAO member in your field.
- Step 3:** Write a four page pre-proposal. From main web page, click on "**How to Apply**" and then click on "**ATP Proposal Preparation Kit**".



How to Apply Algorithm

- Step 4:** Develop a detailed technical idea and write the technical plan.
- Step 5:** Write a business plan and then prepare a budget.
- Step 6:** Incorporate the feedback from the pre-proposal.
- Step 7:** Submit a proposal (maximum 40 pages for single company and 60 pages for joint venture).



ITAO Points of Contact

Staff	Telephone	E-mail Address
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